

FIG. 1

CCCACGCGTCCGCGAGCTTCCCGAGGCTCCGCACCAGCCGCGCTTCTGTCCGCC
 TGCAGGGCATTCCAGAAAGATGAGGATATTTGCTGTCTTTATATTCATGACCT
 ACTGGCATTGCTGAACGCATTTACTGTCACGGTTCCCAAGGACCTATATGTG
 GTAGAGTATGGTAGCAATATGACAATTGAATGCAAATTCCCAGTAGAAAAAC
 AATTAGACCTGGCTGCACTAATTGTCTATTGGGAAATGGAGGATAAGAACAT
 TATTCAATTTGTGCATGGAGAGGAAGACCTGAAGGTTTCAGCATAGTAGCTAC
 AGACAGAGGGGCCGCTGTTGAAGGACCAGCTCTCCCTGGGAAATGCTGCAC
 TTCAGATCACAGATGTGAAATTGCAGGATGCAGGGGTGTACCGCTGCATGAT
 CAGCTATGGTGGTGGCGACTACAAGCGAATTACTGTGAAAGTCAATGCCCCA
 TACAACAAAATCAACCAAAGAATTTTGGTTGTGGATCCAGTCACCTCTGAAC
 ATGAACTGACATGTCAGGCTGAGGGCTACCCCAAGGCCGAAGTCATCTGGAC
 AAGCAGTGACCATCAAGTCCTGAGTGGTAAGACCACCACCACCAATTCCAAG
 AGAGAGGAGAAGCTTTTCAATGTGACCAGCACACTGAGAATCAACACAACA
 ACTAATGAGATTTTCTACTGCACTTTTAGGAGATTAGATCCTGAGGAAAACCA
 TACAGCTGAATTGGTCATCCCAGAACTACCTCTGGCACATCCTCCAAATGAA
 AGGACTCACTTGGTAATTCTGGGAGCCATCTTATTATGCCTTGGTGTAGCACT
 GACATTCATCTTCCGTTTAAGAAAAGGGAGAATGATGGATGTGAAAAAATGT
 GGCATCCAAGATACAACTCAAAGAAGCAAAGTGATACACATTTGGAGGAG
 ACGTAATCCAGCATTGGAACCTTCTGATCTTCAAGCAGGGATTCTCAACCTGTG
 GTTTAGGGGTTTCATCGGGGCTGAGCGTGACAAGAGGAAGGAATGGACCCGTG
 GGATGCAGGCAATGTGGGACTTAAAAGGCCCAAGCACTGAAAATGGAACCT
 GGCGAAAGCAGAGGAGGAGAATGAAGAAAGATGGAGTCAAACAGGGAGCC
 TGGAGGGAGACCTTGATACTTTCAAATGCCTGAGGGGCTCATCGACGCCTGT
 GACAGGGAGAAAGGATACTTCTGAACAAGGAGCCTCCAAGCAAATCATCCAT
 TGCTCATCCTAGGAAGACGGGTTGAGAATCCCTAATTTGAGGGTCAGTTCCTG
 CAGAAGTGCCCTTTGCCTCCACTCAATGCCTCAATTTCTTTTCTGCATGACTG
 AGAGTCTCAGTGTTGGAACGGGACAGTATTTATGTATGAGTTTTTCTATTTA
 TTTTGAGTCTGTGAGGTCTTCTTGTGATGTGAGTGTGGTTGTGAATGATTTCTT
 TTGAAGATATATTGTAGTAGATGTTACAATTTTGTGCGCCAACTAACTTGCT
 GCTTAATGATTTGCTCACATCTAGTAAAACATGGAGTATTTGTAAGGTGCTTG
 GTCTCCTCTATACTACAAGTATACATTGGAAGCATAAAGATCAAACCGTTG
 GTTGCATAGGATGTCACCTTTATTTAACCCATTAATACTCTGGTTGACCTAAT
 CTTATTCTCAGACCTCAAGTGTCTGTGCAGTATCTGTTCCATTTAAATATCAG
 CTTTACAATTATGTGGTAGCCTACACACATAATCTCATTTTCATCGCTGTAACC
 ACCCTGTTGTGATAACCACTATTATTTTACCCATCGTACAGCTGAGGAAGCAA
 ACAGATTAAGTAACTTGCCCAAACCAGTAAATAGCAGACCTCAGACTGCCAC
 CCACTGTCCTTTTATAATAACAATTTACAGCTATATTTTACTTTAAGCAATTCTT
 TTATTCAAAAACCATTTATTAAGTGCCCTTGCAATATCAATCGCTGTGCCAGG
 CATTGAATCTACAGATGTGAGCAAGACAAAGTACCTGTCCTCAAGGAGCTCA
 TAGTATAATGAGGAGATTAACAAGAAAATGTATTATTACAATTTAGTCCAGT
 GTCATAGCATAAGGATGATGCGAGGGGAAAACCCGAGCAGTGTTGCCAAGA
 GGAGGAAATAGGCCAATGTGGTCTGGGACGGTTGGATATACTTAAACATCTT
 AATAATCAGAGTAATTTTCATTTACAAAGAGAGGTTCGGTACTTAAATAACC
 CTGAAAAATAAACTGGAATTCCTTTTCTAGCATTATATTTATTCCTGATTTGC

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FIG. 1 (continued)

CTTTGCCATATAAATCTAATGCTTGTATATAGTGTCTGGTATTGTTTAAACAGT
TCTGTCTTTTCTATTTAAATGCCACTAAATTTTAAATTCATACCTTTCCATGAT
TCAAAATTCAAAAGATCCCATGGGAGATGGTTGGAAAATCTCCACTTCATCC
TCCAAGCCATTCAAGTTTCTTTCCAGAAGCAACTGCTACTGCCTTTCATTCA
TATGTTCTTCTAAAGATAGTCTACATTTGGAAATGTATGTTAAAAGCACGTAT
TTTTAAAATTTTTTTCCTAAATAGTAACACATTGTATGTCTGCTGTGTACTTTG
CTATTTTTATTTATTTTAGTGTTTCTTATATAGCAGATGGAATGAATTTGAAGT
TCCCAGGGCTGAGGATCCATGCCTTCTTTGTTTCTAAGTTATCTTTCCCATAGC
TTTTCAATTATCTTTCATATGATCCAGTATATGTTAAATATGTCCTACATATACA
TTTAGACAACCACCATTTGTTAAGTATTTGCTCTAGGACAGAGTTTGGATTTG
TTTATGTTTGCTCAAAGGAGACCCATGGGCTCTCCAGGGTGCACCTGAGTCA
ATCTAGTCCTAAAAAGCAATCTTATTATTAACCTCTGTATGACAGAATCATGTC
TGGAACCTTTTGTTTTCTGCTTTCTGTCAAGTATAAACTTCACTTTGATGCTGTA
CTTGCAAATCACATTTTCTTTCTGGAAATTCCGGCAGTGTACCTTGACTGCT
AGCTACCCTGTGCCAGAAAAGCCTCATTGTTGTGCTTGAACCCTTGAATGCC
ACCAGCTGTCATCACTACACAGCCCTCCTAAGAGGCTTCCTGGAGGTTTCGA
GATTCAGATGCCCTGGGAGATCCCAGAGTTTCTTTCCCTCTTGGCCATATTC
TGGTGTCAATGACAAGGAGTACCTTGGCTTTGCCACATGTCAAGGCTGAAGA
AACAGTGTCTCCAACAGAGCTCCTTGTTGTTATCTGTTTGTACATGTGCATTTG
TACAGTAATTGGTGTGACAGTGTCTTTGTGTGAATTACAGGCAAGAATTGTG
GCTGAGCAAGGCACATAGTCTACTCAGTCTATTCCTAAGTCCTAACTCCTCCT
TGTGGTGTGGATTTGTAAGGCACTTTATCCCTTTTGTCTCATGTTTCATCGTA
AATGGCATAGGCAGAGATGATACCTAATTCTGCATTTGATTGTCACTTTTTGT
ACCTGCATTAATTTAATAAAATATTCTTATTTATTTTGTACTTGGTAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

Fig. 2 a

Signal peptide

1 MRIFAVFIFMTYWHLNNAFTVTVPKDLYVVEYGSNMTECKFPVEKQLDL

Ig-V-like

51 AALIVYWEMEDKNIIQFVHGEECLKVQHSSYRQRARLLKDQLSLGNAALQ

101 ITDVKLQDAGVYRCMISYGGADYKRITVKVNAPYNKINQRILVDPVTSE

Ig-C-like

151 HELTCQAEGYPKAEVIWTSSDHQVLSGKTTTTNSKREEKLFNVTSTLRIN

201 TTTNEIFYCTFRRLDPEENHTAELVIPELPLAHPPNERTHLVILGAILLC

TM

251 LGVALTFIFRLRKGRMMDVKKCGIQDTNSKKQSDTHLEET

B7-H1 30 V E Y G S N M I E K E P E K Q L D A I I E M
B7-1 43 K V S G H N - V E Q T R I K
B7-2 30 A Y F N T D P Q Q A N Q N Q S E E V F D

80 D D N I I Q F H G E R D - L K V Q S R Q A R L L
88 K M T M M S D M N - - - I V P E K N I
80 Q E N L N E Y L G K E K F D S V E K M G S

88 K D Q L S L G A A Q T D V K L Q A A V R M S Y
95 I T - - - N L S I V L A R P E E T E V V L K
90 S - - - - D S W T E R L H N Q I X K S L Q Q I H H

119 G G A Y K R - - - I T K Y N A P Y K I N Q R L V V
121 Y E K A F R E L A E T K D P T S S D F
116 K K P T G M I I Q M N S E L S Q E V P I

145 D P V E E H E L - - - Q A E K A - E V I T S
151 E I P I R R - I I T S G F E E - H L E N
145 S N I E R V Y I N L S I H E K K M V L R

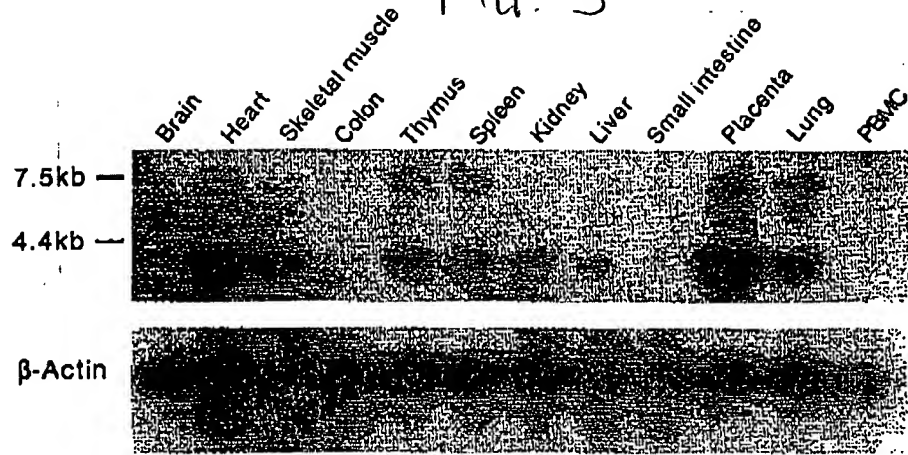
171 D H Q - - - V S K T T N S K E E K F N T T T
179 G E - - - N A N V P A K L
175 T K N S T I Y D G E M Q X - N V L L D I S

198 R I - - - T E I Y T F R R L D P E E H T A E L
205 D F - - - M H E M L I K Y G H L V - - Q T
204 R V S F P D V E M T I F I L E T D E L L S - S P

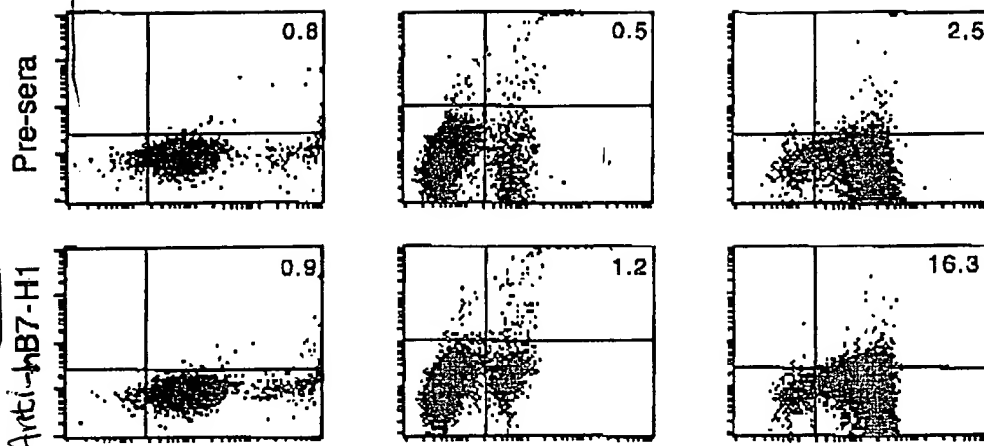
225 V P E L P L A P P N E R T
230 N W N T T K Q E H P N L L
233 S E L E D P Q P H I P

FIG. 2 b

FIG. 3



Resting cells



Activated cells

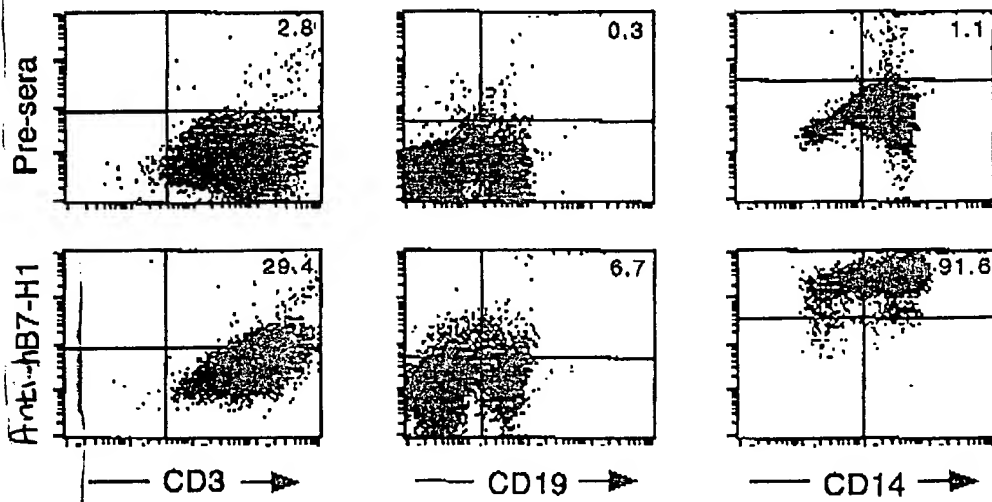


FIG. 4

FIG. 5a

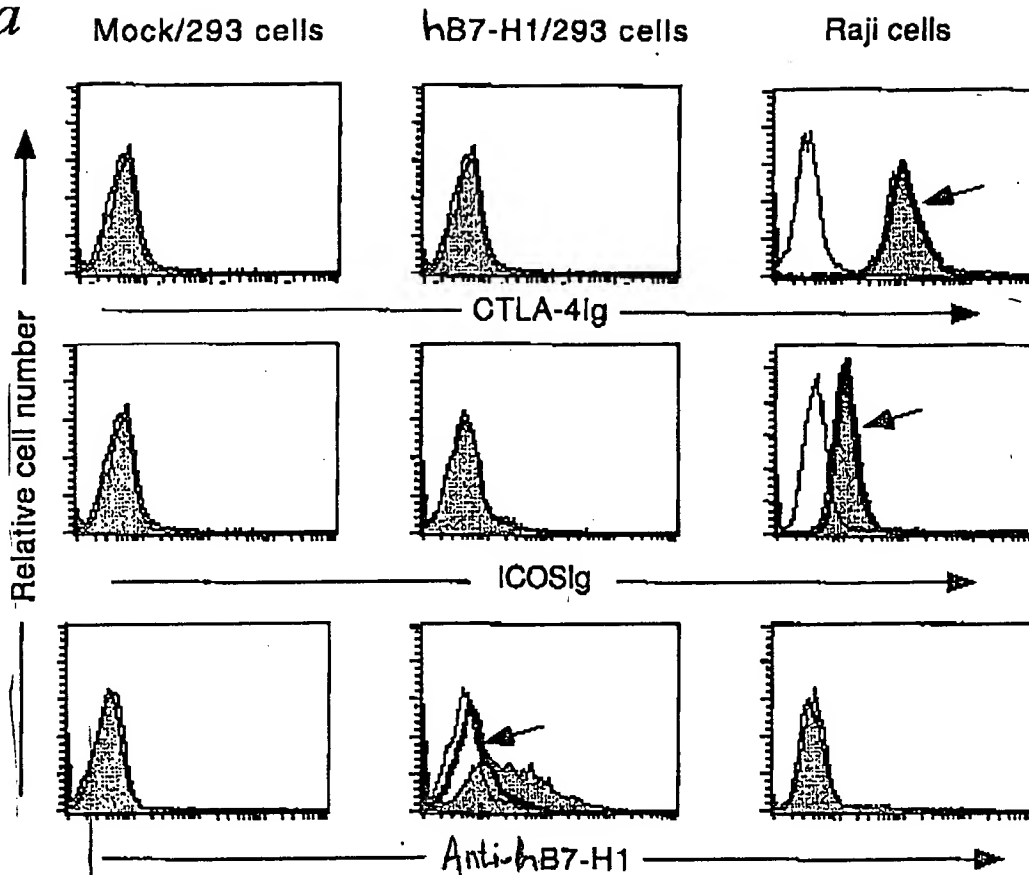


FIG. 5b

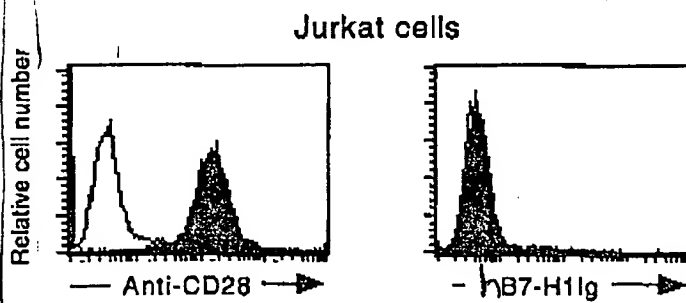


FIG. 6a

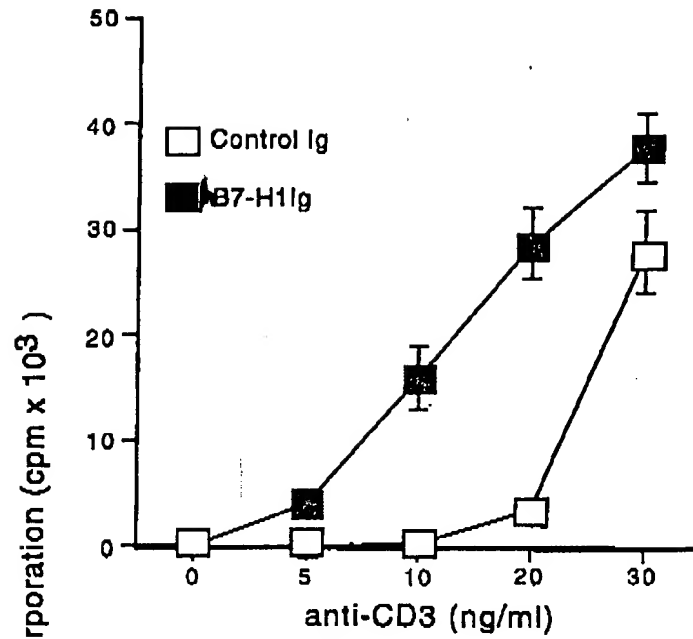
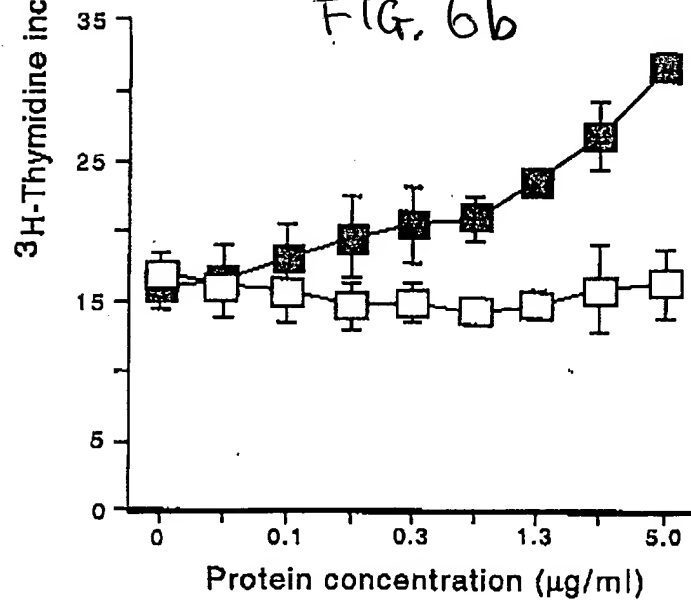


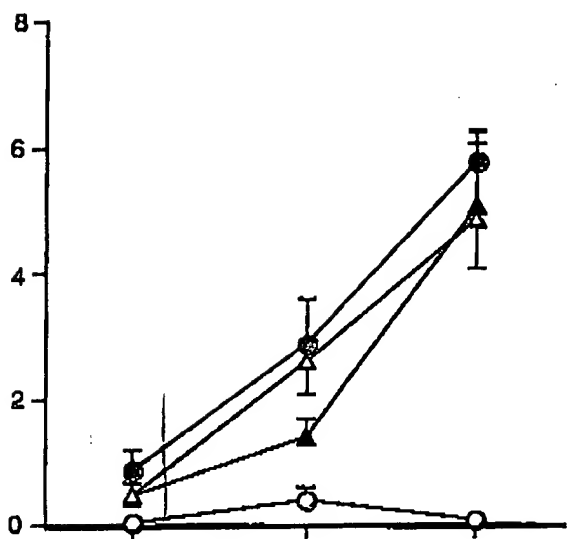
FIG. 6b



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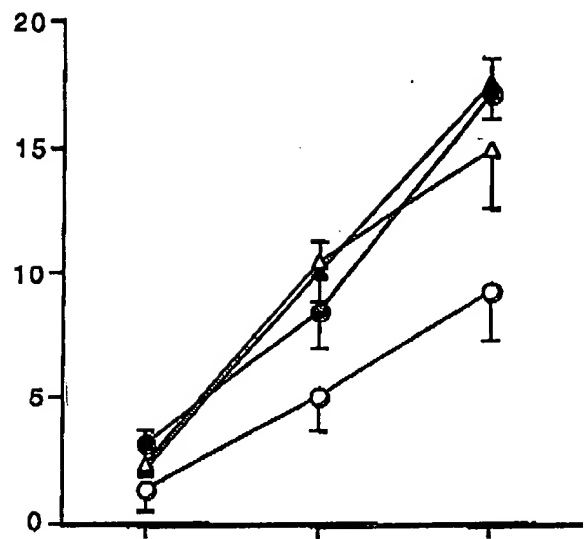
IL-10

FIG. 7a



IFN- γ

FIG. 7b



IL-2

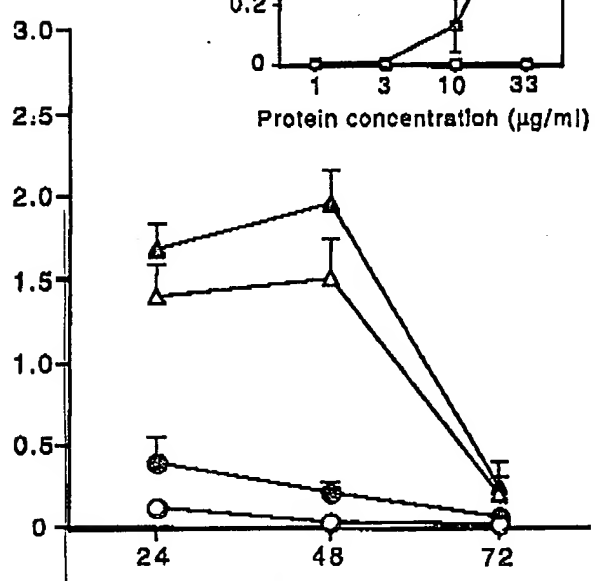


FIG. 7c

Culture time (Hours)

IL-4

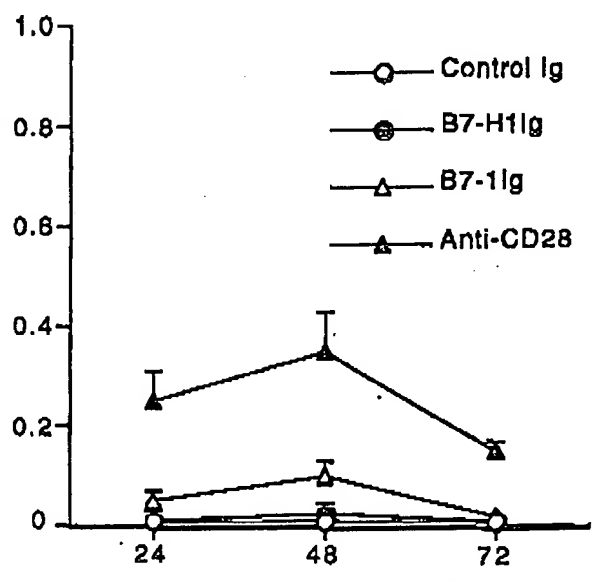


FIG. 7d

FIG. 7e

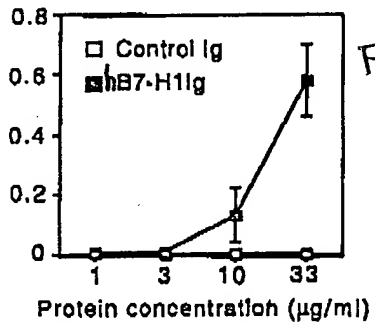


FIG. 8a

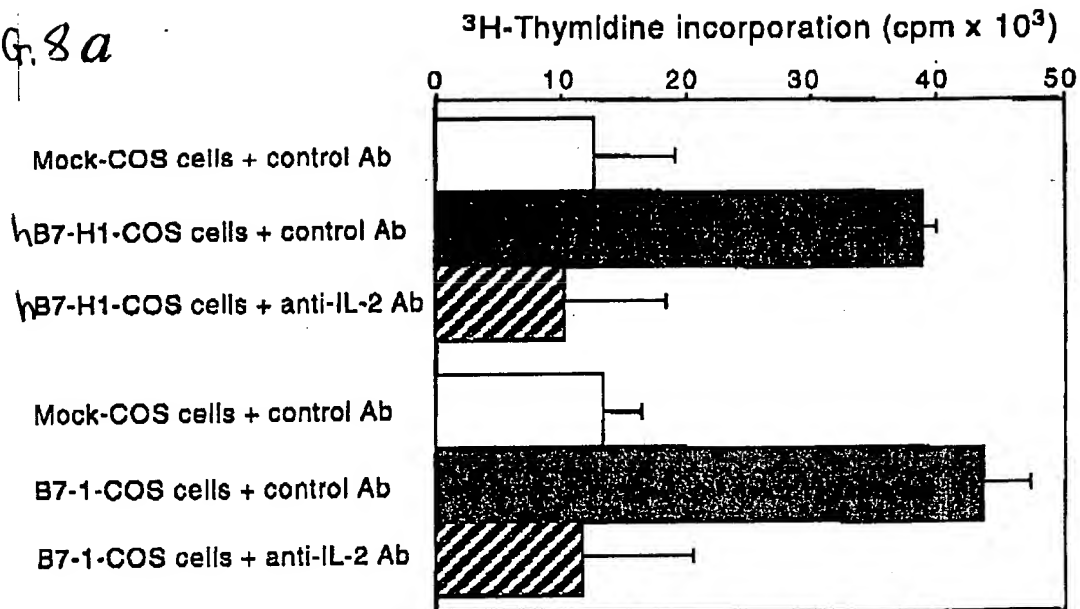


FIG. 8b

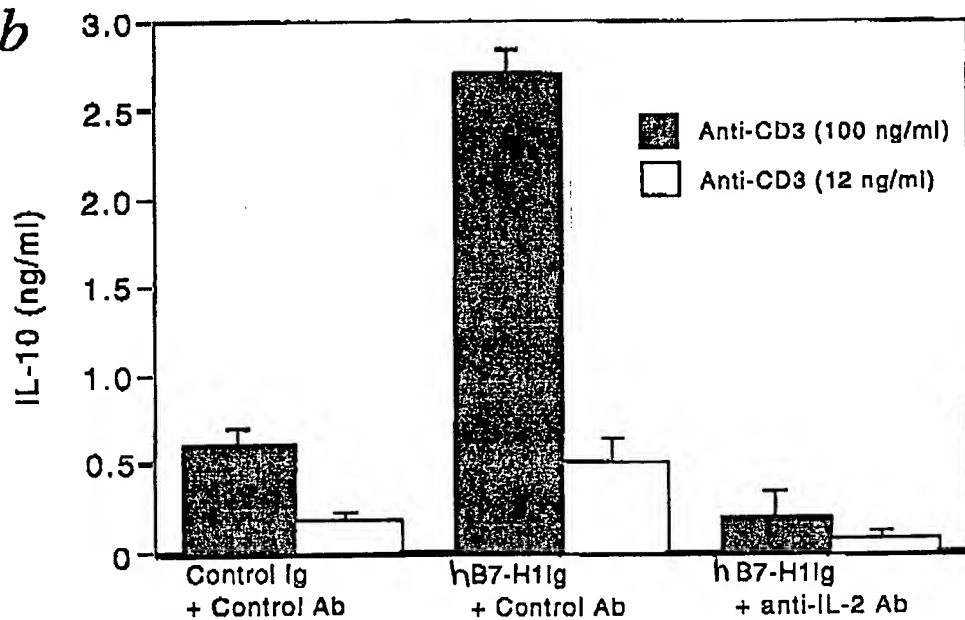


FIG. 9 a

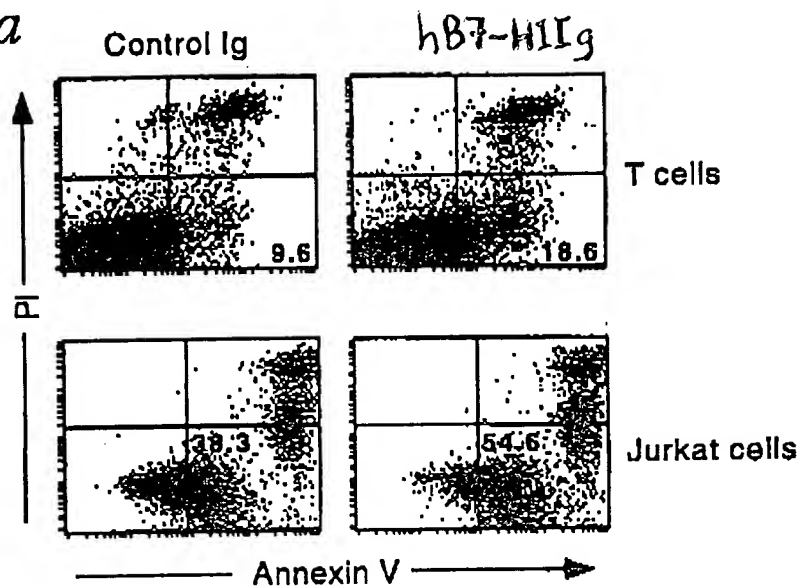


FIG. 9 b

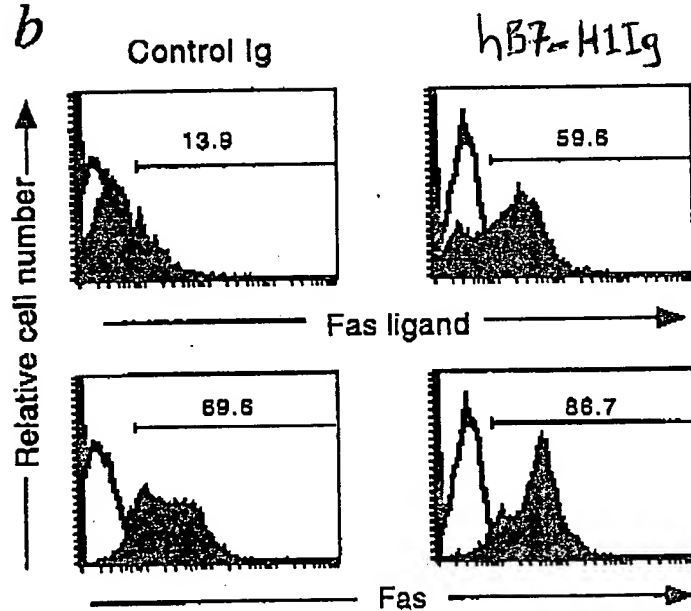


FIG. 10

ATGAGGATATTTGCTGGCATTATATTCACAGCCTGCTGTCACTTGCTACGGGC
GTTTACTATCACGGCTCCAAAGGACTTGTACGTGGTGGAGTATGGCAGCAAC
GTCACGATGGAGTGCAGATTCCCTGTAGAACGGGAGCTGGACCTGCTTGCGT
TAGTGGTGTACTGGGAAAAGGAAGATGAGCAAGTGATTCAGTTTGTGGCAGG
AGAGGAGGACCTTAAGCCTCAGCACAGCAACTTCAGGGGGAGAGCCTCGCT
GCCAAAGGACCAGCTTTTGAAGGGAAATGCTGCCCTTCAGATCACAGACGTC
AAGCTGCAGGACGCAGGCGTTTACTGCTGCATAATCAGCTACGGTGGTGC GG
ACTACAAGCGAATCACGCTGAAAGTCAATGCCCCATACCGCAAAATCAACCA
GAGAATTTCCGTGGATCCAGCCACTTCTGAGCATGAACTAATATGTCAGGCC
GAGGGTTATCCAGAAGCTGAGGTAATCTGGACAAACAGTGACCACCAACCCG
TGAGTGGGAAGAGAAGTGTCACCACTTCCCGGACAGAGGGGATGCTTCTCAA
TGTGACCAGCAGTCTGAGGGTCAACGCCACAGCGAATGATGTTTTCTACTGT
ACGTTTTTGAGATCACAGCCAGGGCAAACACACAGCGGAGCTGATCATCC
CAGAACTGCCTGCAACACATCCTCCACAGAACAGGACTCACTGGGTGCTTCT
GGGATCCATCCTGTTGTTCCCTCATTGTAGTGTCCACGGTCCTCCTCTTCTGAG
AAAACAAGTGAGAATGCTAGATGTGGAGAAATGTGGCGTTGAAGATACAAG
CTCAAAAAACCGAAATGATACACAATTCGAGGAGACGTAA

mock.P815

FIG. 12a

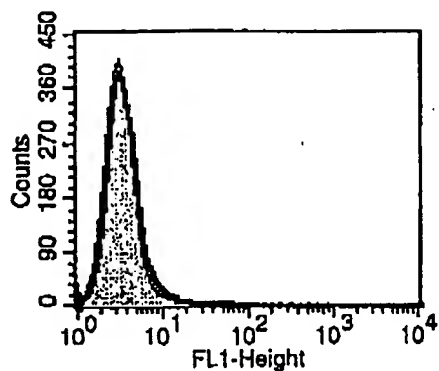
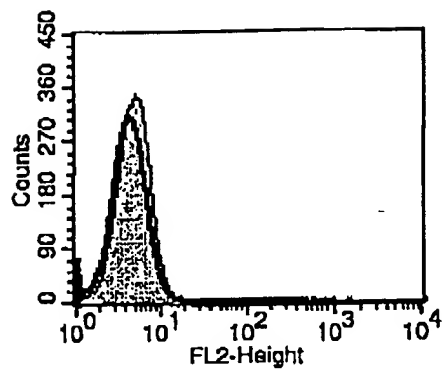


FIG. 12b



mB7-1.P815

FIG. 13a

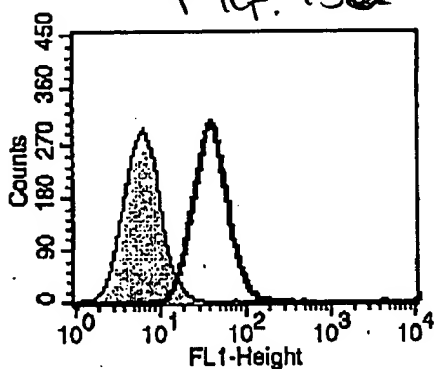
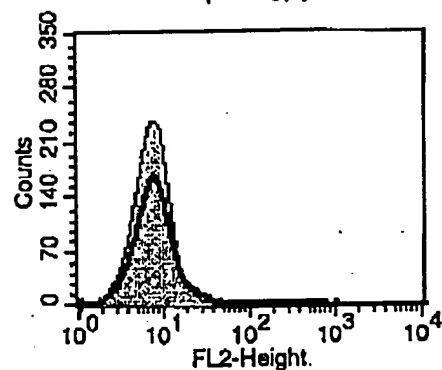


FIG. 13b



mB7H.P815.
3E13

FIG. 14a

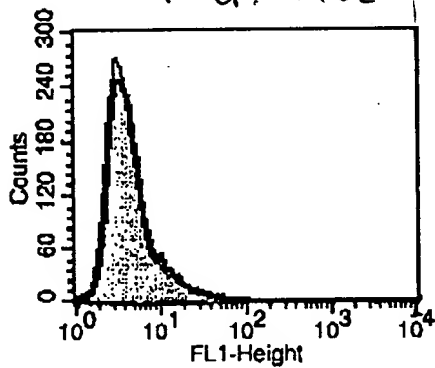
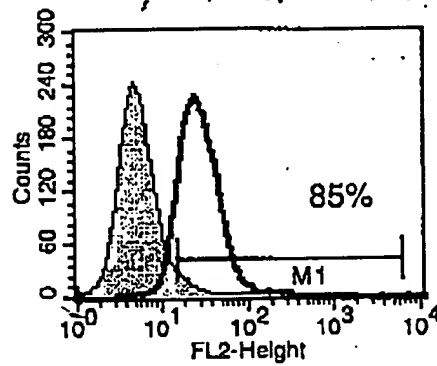


FIG. 14b



anti-mB7-1-FITC →

anti-mB7H/PE →

FIG. 15a

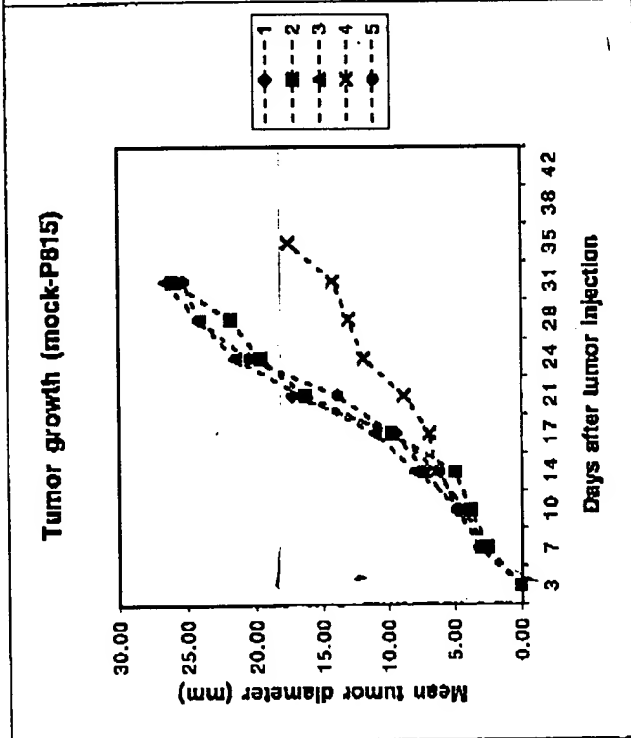


FIG. 15b

